



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Andrew M. Welin

Serial No: 09/785,768

Filed: 02/16/01

For: Systems, Processes and Integrated Circuits for Improved Packet Scheduling of Media Over Packet

Docket No.: TI-29045

Art Unit: TBD

Examiner: TBD

Assistant Commissioner for

Patents

Washington, DC 20231

**MAILING CERTIFICATE UNDER 37 C.F.R. §1.8(A)**

I hereby certify that the above correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Karen Vertz  
Karen Vertz

3-14-01  
Date

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97 AND 1.98**

Dear Sir:

Form PTO 1449 is enclosed along with a copy of each document listed thereon.

**CONCISE EXPLANATION OF RELEVANCE**

The following references are believed to be relevant at least for the reasons set out below. Where the date is unknown, or the reference may be able to be sworn behind, listing herein is not to be taken that the reference is necessarily prior art.

U.S. Patent 5,953,411 discusses maintaining audio sample correlation as in Figs. 5 and 6 and cols. 3-4 for echo cancellation.

U.S. Patent 5,913,062 discusses a conference system and in Fig. 37 and col. 80 mentions a preemptive priority based transmission process.

U.S. Patent 5,881,296 discusses interrupt processing as in Fig. 2 and mentions "orphaned packets are lost" col.2, lines 64-65, and "linked list of control packets" col. 5, line 1, and a "delay interval" col. 6 lines 18-33.

U.S. Patent 5,790,538 discusses voice playout in an asynchronous packet network as in Figs. 1 and 5 and col. 6, first full paragraph, where the transmitter inserts contents of a free-running modulo-16 packet counter into each transmitted packet, allowing the receiver to detect lost packets and reproduce silence intervals during playout.

U.S. Patent 4,908,748 in Fig. 2a and cols. 11-13 describes a circular addressing arrangement.

U.S. Patent 4,800,524 mentions a circular buffer at col. 1 line 67, and shows a modulo address generator in Fig. 2.

Real-Time Systems Design and Analysis describes various preemptive and other systems at pp. 152-157.

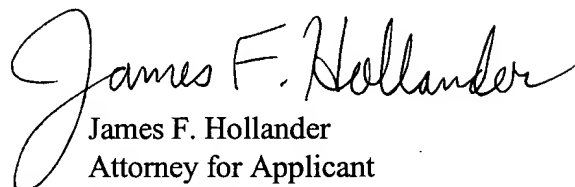
"Voice Over Packet" in Fig. 6 on p. 10 shows a voice packet module with various blocks.

Ramjee et al., "Adaptive Playout Mechanisms for Packetized Audio Applications in Wide-Area Networks" 1994, shows timings of a packet in Fig. 2, and playout mechanisms in Fig. 3 on p. 682. On p. 685, col. 1, fourth paragraph, a simulation adopted a circular buffering scheme. "When a packet arrives, its playout time is computed (according to one of the algorithms described in sections 3.1 - 3.4) and the packet is placed in the appropriate location in the playout buffer."

Montgomery, "Techniques for Packet Voice Synchronization" 1983 in Fig. 1 shows a "too late" packet and Fig. 6 on p. 1026 shows use of "delay stamps."

Please charge any fees required by this paper to Deposit Account 20-0668 of Texas Instruments Incorporated. An original and two copies of this sheet are enclosed.

Respectfully submitted,

  
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U. S. Department of Commerce Patent and Trademark Office  List of Documents Cited By Applicant (use several sheets if necessary)	Atty. Docket No.  TI-29045	Serial No.  TBD
	Applicant(s)  Andrew M. Welin	
	Filing Date  Herewith	Group  TBD

## U. S. PATENT DOCUMENTS

Examiner Initial *		Document No.	Date	Name	Class	Subclass	Filing Date (If Appropriate)
	A	5,953,411	9/14/99	Farrell			
	B	5,913,062	6/15/99	Vrvilo et al.			
	C	5,881,296	3/9/99	Williams et al.			
	D	5,790,538	8/4/98	Sugar			
	E	4,908,748	3/13/90	Pathak et al.			
	F	4,800,524	1/24/89	Roesgen			

## FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation Yes or No
	G						
	H						
	I						
	J						
	K						

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	I	Phillip A. Laplante, Real-Time Systems Design and Analysis PP. 152-157, 1997
	M	Edward B. Morgan, "Voice Over Packet" Telogy Networks, Inc., 1997
	N	Ramjee et al., "Adaptive Playout Mechanisms for Packetized Audio Applications in Wide-Area Networks" IEEE, pp. 680-688, 1994
	O	Warren A. Montgomery, "Techniques for Packet Voice Synchronization" IEEE Journal on Selected Areas in Communications, Vol. SAC-1, No. 6, pp. 1022-1028, December 1983

Examiner	Date Considered
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Examiner Initial \*: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.